Inventor: Ronald E. Highsmith Honeywell Docket No. H0001323 Serial No: 09/855,480 Bingham Docket No. 55-003-001

Art Unit: 1724

IN THE CLAIMS

Please cancel claims 12-19.

(Currently Amended) A beneficiated sludge solids composition characterized by its ability
to reduce ammonia emissions, the composition [comprising] consisting essentially of:
digested municipal sewage sludge containing carbonate or carbon dioxide;

ammonium sulfate;

mineral acid; and

phosphate salt;

wherein the acid causes decomposition of the carbonate or carbon dioxide so that ammonia emissions are minimized.

- 2. (Original) The beneficiated sludge solids composition of Claim 1, comprising on a water-free basis: about 10 wt.% to about 77 wt.% of said digested municipal sewage sludge; about 21 wt.% to about 88 wt.% of said ammonium sulfate; about 1 wt.% to about 12 wt.% of said mineral acid; and about 0.3 wt.% to about 6 wt.% of said phosphate salt.
- 3. (Original) The beneficiated sludge solids composition of Claim 1, comprising on a water-free basis: about 25 wt.% to about 75 wt.% of said digested municipal sewage sludge; about 23 wt.% to about 73 wt.% of said ammonium sulfate; about 2.5 wt.% to about 9 wt.% of said mineral acid; and about 0.5 wt.% to about 5 wt.% of said phosphate salt.
- 4. (Original) The beneficiated sludge solids composition of Claim 1, comprising on a water-free basis: about 35 wt.% to about 70 wt.% of said digested municipal sewage sludge; about 28 wt.% to about 63 wt.% of said ammonium sulfate; about 2.5 wt.% to about 9 wt.% of said mineral acid; and about 0.5 wt.% to about 5 wt.% of said phosphate salt.

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5. (Original) The beneficiated sludge solids composition of Claim 1, wherein the digested municipal sewage sludge is anaerobically digested.

- 6. (Original) The beneficiated sludge solids composition of Claim 1, wherein the mineral acid is at least one member selected from the group consisting of sulfuric acid and phosphoric acid.
- 7. (Original) The beneficiated sludge solids composition of Claim 1, wherein the phosphate salt is at least one member selected from the group consisting of ammonium metaphosphate (NH $_4$ PO $_3$), ammonium monobasic phosphate (NH $_4$ H $_2$ PO $_4$), ammonium dibasic phosphate ($(NH_4)_2HPO_4$), ammonium polyphosphate ($(NH_4)_5P_3O_{10}$)), trisodium phosphate (Na₃PO₄), tetrasodium pyrophosphate (Na₄P₂O₇), sodium tripolyphosphate (Na₅P₃O₁₀), hexasodium hexaphosphate (Na₆P₆O₁₈), potassium metaphosphate (KPO3), potassium pyrophosphate (K4P2O7), potassium monobasic phosphate (KH2PO4), potassium dibasic phosphate (KHPO4), potassium tribasic phosphate (K_3PO_4) and calcium superphosphate $(Ca(H_2PO_4)_2)$.
- 8. (Previously Amended) The beneficiated sludge solids composition of Claim 1, wherein the phosphate salt is at least one member selected from the group consisting of trisodium phosphate and sodium tripolyphosphate.
- 9. (Original) The beneficiated sludge solids composition of Claim 1, having a water content of between about 0 wt.% to about 10 wt.%.
- 10. (Original) The beneficiated sludge solids composition of Claim 1, having a water content of between about 0 wt.% to about 5 wt.%.
- 11. (Original) The beneficiated sludge solids composition of Claim 10 in granulated form.

CLAIMS 12 – 29 (WITHDRAWN)

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ADDED CLAIMS

30. (Added) A beneficiated sludge solids composition characterized by its ability to reduce ammonia emissions, the composition comprising:

digested municipal sewage sludge containing carbonate or carbon dioxide; ammonium sulfate:

mineral acid; and

phosphate salt, wherein the salt is selected from the group of trisodium phosphate or sodium tripolyphosphate;

wherein the acid causes decomposition of the carbonate or carbon dioxide so that ammonia emissions are minimized.

- 31. (Added) The beneficiated sludge solids composition of Claim 30, comprising on a water-free basis: about 10 wt.% to about 77 wt.% of said digested municipal sewage sludge; about 21 wt.% to about 88 wt.% of said ammonium sulfate; about 1 wt.% to about 12 wt.% of said mineral acid; and about 0.3 wt.% to about 6 wt.% of said phosphate salt.
- 32. (Added) The beneficiated sludge solids composition of Claim 30, comprising on a water-free basis: about 25 wt.% to about 75 wt.% of said digested municipal sewage sludge; about 23 wt.% to about 73 wt.% of said ammonium sulfate; about 2.5 wt.% to about 9 wt.% of said mineral acid; and about 0.5 wt.% to about 5 wt.% of said phosphate salt.
- 33. (Added) The beneficiated sludge solids composition of Claim 30, comprising on a water-free basis: about 35 wt.% to about 70 wt.% of said digested municipal sewage sludge; about 28 wt.% to about 63 wt.% of said ammonium sulfate; about 2.5 wt.% to about 9 wt.% of said mineral acid; and about 0.5 wt.% to about 5 wt.% of said phosphate salt.